46. Saunders. Arch. of Pediatrics, April, 1902.
47. Nordgren. Nordiskt medicinskt Arkiv, 1902.
48. Graanboom. Herinneringsbundel, Rosenstein, 1902.
49. Trantenroth. Mitt. aus d. Grenzgeb. d. Med. d. Chir., 1902, vol. ix.
50. Cautley and Dent. Lancet, December 20, 1902.
51. Cautley. Medico-Chirurgical Transactions, 1903.
52. Riviere. Lancet, December 20, 1902.
53. Gardner. Ibid., January 10, 1903.
54. Shaw. Brooklyn Medical Journal, May, 1903.
55. Freund. Mitt. aus d. Grenzgeb. d. Med. u. Chir., 1903, vol. xi.
56. West. Arch. of Pediatrics, October, 1903.
57. Variot. Gazette des hôpitaux, June 16, 1903.
58. Greeff. Medical Record, August 8, 1903.
59. Gallant. Ibid.
60. Mackay. Intercollegiate Medical Journal of Australasia, November 20, 1903.
61. Schotten. Samml. klin. Vorträge, 1904, No. 368.
62. Cautley. Lancet, March 5, 1904.
63. Cleveland. British Medical Journal, May 7, 1904.
64. McCaw and Campbell. Ibid., June 25, 1904.
65. Dorning. Arch. of Pediatrics, September, 1904.
66. Stamm. Arch. f. Kinderheilk., 1904, Bd. xxxviii.
67. Grisson. Deut. Zeitschr. f. Chirurgie, October, 1904.

A CASE OF DERMOID OF THE FEMALE URINARY BLADDER.

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Miss H., Kansas, aged eighteen years, first consulted me in September, 1904. A brunette, rather slender and somewhat frail in appearance. Very nervous and emotional, indicating previous suffering. Without any history of definite antecedent ailments, though claiming to have always been delicate. Nothing noteworthy in the family history bearing on her present condition. Some five years since she began to observe a painless urinary frequency. It was both diurnal and nocturnal and continued, varying in intensity, until one year ago, when dysuria became a prominent symptom. From that time until she came under observation periods of intense suffering, irregular as to time and duration, were noted. After a paroxysm of cystospasm and tenesmus, relief followed the expulsion of a small calculus. Neither at these periods, nor during the intervals, was there any hæmaturia. As near as could be learned, these extrusions averaged a semi-monthly repetition. The calculi were not voided into the vessel with the urinary stream, but it was alleged that they were always removed from the vulva by the patient.

A considerable number of these concretions were preserved by the patient and presented for identification at the first consultation. The smallest weighed 5 cgm.; the largest 5 dcgm. Their basic shape was pyriform, at times resembling a club; quite a number of them preserving this basic form were curved, approaching a comma, and at times an interrogation point in contour. Occasionally they described a sigmoid.

From the apex of most, if not all, there protruded a hair with a terminal investing root sheath. The color of the hirsute nucleus was that of those upon the bearer's head and mons.

The urine was large in quantity and low in gravity, with an abundance of pus cells in the sediment. The latter were the only adventitious elements worthy of remark.

The patient was very sensitive and hyperæsthetic, yet under local anæsthesia a cystoscopy became possible. In passing, it may be observed that the provisional diagnosis of dermoid was suggested. A most tenable objection to this view was that of hysterical introduction. This was entertained, but rejected. Though recognizing the urinary bladder as a favored receptacle among these neurotics, in this instance, at least, we were able to dismiss this from consideration, for reasons to appear later on.

The cystoscope revealed a congested and chronically inflamed mucosa, and lying in the trigone was a good-sized stone, weighing 19 gm. It was irregularly spherical; beyond and above this three smaller calculi, approximating the forms already described, and each containing a hair, about which clustered the slender concretions, were readily discernible. The calculi were phosphatic in composition. Since the largest was not subjected to cleavage, the character of its nucleus remains uncertain.

Beyond and to the right of the right posterior angle of the trigone, seemingly some distance from the right ureteral ostium, a projection from the mucosa indicated the presence of a tumor. Its exact size, color, form, and relations could not be noted at the time, owing to a vesical intolerance spastically crowding the instrument.

The patient being prepared in the usual manner, a general anæsthesia was administered. Thoroughly dilating the urethra, an effort was made to drag the stone through the expanded canal. This proving practically impossible without running the risk of a subsequent incontinence, and not wishing to crush the specimen, the suprapubic route was substituted.

Removing the calculi, the dermoid was located and with some difficulty seized, brought into view, and excised. It proved to be no larger than the half of a very small raspberry. Its mucous aspect resembled the former, both to the touch and in appearance. Under the loop some seven or eight protruding hairs were visible; indeed, if viewed in a proper light, they could be readily seen by the unaided eye.

The patient made an uneventful recovery. Cystoscopy, done at leisure and without local anæsthesia prior to her dismissal, disclosed the bladder with a minimum of hyperæmia. The former seat of the fetal inclusion was plainly visible; a very small, stumpy, circular disk marked its former site.

Sections of the "growth" were made by Prof. Frank J. Hall, pathologist to the Kansas City Medical College, a description of which is herewith appended.

Judging from the scant literature on the subject of dermoids in this locality, they may be regarded as among the surgical curiosities, and yet, in view of all the available data in this case, diagnosis was easy, even without the aid of instruments of precision.

It is evident that until adolescence the presence of an ectodermic alien might remain unresented. As development proceeds, however, the growth and shedding of the hairs would soon usher in a disturbance. The history of our case proves this assumption corroborative.

As the hairs grew and projected into the urinary reservoir, calcareous deposition from its excrementitious contents must have been greatest upon their distal ends. The latter being exposed longest, one can readily apprehend the tendency to club forms. For the same reason, owing to increasing and increased weight, the peculiar curvings described were quite natural. Again, the root sheath always presenting at the apex and thinnest portion of the calculus, plainly indicated a short exposure to the decomposing urine. The stone evidently fell and escaped as soon as it reached maturity.

The apical root sheath negatived the always plausible theory of hysterical perversion. In the latter event, more than likely, the deposition would have proceeded in a regular manner, forming ovals or spheres, and, if retained for some time, facets, the result of attrition, would have been present.

However frequent these fetal inclusions or rests may be in other parts of the body, they are certainly very rare in the urinary bladder.

Quite a number of recorded instances occurring in the neighborhood of the ureteral opening contained, among other elements, muscle and cartilage cells, as well as sarcoma cells. These rather suggested the character of a neoplasm, and from their nature and location probably originated in the Wolffian body.

Since hæmaturia at some time in the history of a vesical neoplasm is among the most characteristic, if not most prominent symptoms, its absence in our case was exceedingly noteworthy. It was doubly so after the cystoscope revealed the presence of a tumor. In the face of both the positive and negative testimony, it would have been impossible to escape the conclusion that this must be a dermoid.

Suppurating dermoidal evacuations by the vesical route are not uncommon. This is an entirely different matter and cannot be classed with the subject under discussion.

We are all aware that a small percentage of vesical calculi is subject to relapse after removal. The usual causes are well understood. Is it not possible that this may be an occasional factor, some element in the ectodermic tissue forming a nucleus for a renewal of the concretion?

Technically, no doubt, the entire operative procedure was feasible *via* the urethra. But whether the valuable specimen forming the basis of this contribution could have been secured intact is not so certain.

DR. HALL'S REPORT.

The following description of the bladder "tumor" presented September 15, 1904, for microscopic examination is respectfully submitted:

Gross Description. The tumor is shaped like a sphere vertically depressed. In horizontal direction the tumor measures 8 mm.; in vertical, 5 mm. It presents at the point of attachment to the bladder a small, fibrous pedicle about 1 mm. in diameter.

The color of the tumor is light pink, and in consistence elastic and soft. The surface is marked by many small dimples and rugosities. Under low magnification, or even naked-eye inspection, one makes out, emerging from the dimpled spots on the surface, rather fine hairs. One of these had a considerable deposit of urinary salts about its free end.

Microscopic Description. Sections were cut vertical to the great diameter of the tumor. Under low power the growth presents a covering of squamous epithelium resting upon typical dermal structures.

The covering epidermis shows a well-developed stratum granulosum and lucidum. The interpapillary plugs of epithelium are rather irregular in both size, shape, and distribution, but otherwise normal.

Connecting with the surface are several deep and irregular depressions lined with epidermis, and receiving at their bottoms the orifices of sebaceous glands and hair follicles. The sebaceous glands are large and typically formed. Here and there in the section are presented variously cut hair follicles and sebaceous structures.

Deeply situated in the section are several fairly large aggregations of cells which present, on close examination, the structure of glandular epithelium. The basal row of cells in these masses are tall, columnar, narrow at the free ends, and somewhat ragged. The nuclei are round and vesicular and placed near the bottom or base of cell. The cell cytoplasm stains very lightly with eosin and seems to be filled with clear, spherical spaces, which I believe to be the cavities left from absorption of fat by ether in the preparation of the sections. In other sections, typical areas of tubular glands present in variously cut sections. Here the epithelium is tall, columnar, and presents the features distinctive of the axillary sweat glands. In the close neighborhood of these glands are many irregular spaces lined with double layers of pavement epithelium. The lumina of these spaces contain an unstained granular matter, evidently coagulated secretion. At a few points these irregular channels can be traced to the masses of gland tubules, and are evidently very tortuous and dilated ducts.

The connective tissue throughout the growth is disposed similar to that of the normal corium and constructed of the same elements. The growth is well supplied with veins and arteries whose walls are apparently somewhat thicker than vessels of corresponding size in the normal corium. In the papillary portion of this corium are areas of round cells. Here is noted frequent nuclear degeneration; the nuclei being drawn out into various bizarre threads and clumps of intensely staining chromatin.

Withal the growth is a typical dermoid.

TWO CASES OF ULCERATIVE PERFORATION OF THE RECTUM ORIGINATING FROM A GONORRHŒAL SALPINGITIS.

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The ordinary conception of the pathological anatomy of gonorrhœa is that it is a superficial process confined mainly to mucous membranes. But the gonococcus is sometimes capable of penetrating tissues and there producing abscesses and even ulceration. Of especial note is the research of Wertheim,[1] who showed the gonococcus to be present not only in the pus, but also in the tissues of a pyosalpinx. Wertheim found, by using the staining method of Kühne (carbol-methylene blue), or even by staining with a simple methylene-blue solution, absolutely characteristic gonococci, not only in the epithelium, but also localized in the uppermost layers of the connective tissue, far more often lying in the cells than in the intercellular substance.

Thus, also, Frisch[2] found, in examination of microscopic sections of a rectal mucosa, pieces of which were extirpated both during life and after death, that in places the cylinder epithelium and partly the rectal mucosa itself, with the superficial portion of the crypts of Lieberkühn, were wanting, so that even macroscopically distinctly visible ulcers were seen. In the crypts, as well as in the connective-tissue spaces between the crypts and in the partly infiltrated mucosal connective tissue up to but not into the muscular coat, there were